

IN THE DRAWINGS

The attached sheet of drawings includes changes to Figs. 1 and 2 to include the legend "Prior Art," as required by the Examiner. This sheet, which includes Figs. 1 and 2, replaces the original sheet including Figs. 1 and 2.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-30 are presently active in this case. The present Amendment amends Claim 4 and adds Claims 17-30.

In the outstanding Office Action, the oath or declaration was indicated as defective. The disclosure was objected to because of informalities. Figs. 1 and 2 were objected to under M.P.E.P. § 608.02(g). Claims 1-4, 6-14, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pages (U.S. Patent No. 5,774,818) in view of Trikha (U.S. Patent No. 6,003,811). Claims 5 and 15 were objected to but indicated to be allowable if rewritten in independent form. Applicant appreciatively acknowledges the indication of allowable subject matter in the claims.

In response to the indication of a defective oath or declaration, Applicant notes that the Office Action stated that “[t]he mailing address may be provided in an application data sheet or a supplemental oath or declaration.” Accordingly, an application data sheet including the mailing address of the inventor is submitted herewith.

In response to the objections to the disclosure, the cited informalities have been corrected. The specification is now believed to be compliant and no further objection on this basis is anticipated.

In response to the objection to Figs. 1 and 2, submitted herewith is a Letter Submitting Replacement Sheets along with 1 Replacement Sheet for Figs. 1 and 2 adding the legend “prior art” to Figs. 1 and 2. The drawings are now believed to be compliant and no further objection on this basis is anticipated.

In response to the rejection of Claims 1-4, 6-14, and 16 under U.S.C. § 103(a), Applicant respectfully requests reconsideration of the rejection and traverses the rejection as discussed next.

Briefly recapitulating, Applicant's invention, as recited in Claim 1, relates to a method for operating an aircraft, including the steps of: receiving guidance instructions and guidance parameters at a navigation computer; transmitting automatic pilot instructions from the navigation computer to a flight control computer; receiving control instructions and the automatic pilot instructions at the flight control computer; and, in an automatic pilot mode, generating a first plurality of operating commands based on the automatic pilot instructions at the flight control computer.

As explained in Applicant's specification at page 5, lines 6-25, and page 6, lines 1-7, Applicant's invention improves upon methods based on conventional systems, such as those illustrated in Figs. 1 and 2, because unlike these systems, which resort to both a navigation computer 9A and a control computer 9B to control the actuators 6 either directly, as in Fig. 1, or via a flight control computer 3, as in Fig. 2, Applicant's invention does not require a control computer 9B. The claimed invention thus leads to an improved method for operating an aircraft.¹ More specifically, it avoids the need to use a pair of control functions, a feature which can be associated with significant costs and duplicate validation of the control functions. Moreover, the invention makes it possible to reduce the delays between the inertial information and the operating commands given by the automatic pilot to the control surfaces.

The Office Action asserts at page 3 that column 5, lines 36-39, and element 15 of Figure 4 of the Pages patent teaches "receiving guidance instructions and guidance parameters at a navigation computer." Applicant respectfully submits that element 15

¹ See Applicant's specification at page 2, lines 12-20.

represents navigation instruments having only outgoing arrows and therefore element 15 does not receive anything and cannot be analogous to the claimed navigation computer.

Applicant further notes that element 15 of the Pages patent only sends “the navigational data in real time, and notably the position P and heading R of the aerodyne.”² This does not comprise any guidance instructions. Rather, the guidance instructions are sent using element 11 which provides “points entered by the pilot.”³ The only element of Figure 4 receiving both data and instructions is element 12.

The Office Action further asserts at page 3 that column 5, lines 43-52, and Figure 4 of the Pages patent teaches “transmitting automatic [pilot] instructions from said navigation computer to a flight control computer” and “receiving control instructions and said automatic pilot instructions at said flight control computer.” Applicant respectfully disagrees. The Pages patent clearly states that the computer 12 provides the *automatic piloting device* 13 “with the position (L_n, M_n) and route R_n of the next point P_n to be reached.”⁴ As such, the automatic piloting device is not analogous to the claimed flight control computer, but rather to component 9B of the *automatic pilot* 9 of Applicant’s specification.

Accordingly, since the Pages patent does not teach all the limitations of independent Claims 1 and 13, and since the Trikha patent does not cure those deficiencies, the Pages and Trikha patents, whether taken alone or in combination, fail to teach or suggest every feature recited in Applicant's claims, so that Claims 1-16 are patentably distinct over the prior art. Accordingly, Applicant respectfully traverses, and requests reconsideration of, the rejection based on the Pages and Trikha patents.

² See the Pages patent at col. 5, lines 38-39.

³ See the Pages patent at col. 5, lines 31-32.

⁴ See the Pages patent at col. 5, lines 45-46.

Furthermore, in Figure 4 of the Pages patent, “[t]he computer 12 is connected to the aerodyne’s automatic piloting device 13”⁵ and “[t]he automatic piloting device 13 is further connected to the navigational instruments 15 (...) and to the control surface actuators 14.”⁶ The Pages patent thus discloses a system similar to the conventional system illustrated in Figure 1 of Applicant’s specification and whose deficiencies the claimed invention corrects. More precisely, the terminal 11, computer 12, PA (French acronym for automatic pilot) 13, actuators 14, and navigation instruments 15 of Figure 4 in the Pages patent are respectively analogous to the device 10, navigation computer 9A, control computer 9B, actuators 6, and lines 12 of Figure 1 in Applicant’s specification.

Applicant thus respectfully submits that an assertion that the features of independent Claims 1 and 13 are taught by the Pages patent cannot be properly formulated in the context of the Pages patent, the method of which is based on a system that does not comprise the claimed flight control computer. Applicant respectfully requests that the rejection of Claims 1-16 based on the Pages patent be withdrawn.

In order to vary the scope of protection recited in the claims, new Claims 17-30 are added. Claim 17 is similar to Claims 1 and 6 and specifies that a single control function is embedded in the flight control computer. This feature further distinguishes the claimed invention, as recited in Claim 17, over the prior art. Specifically, methods based on conventional systems, such as that discussed in the Pages patent, require more than one control function and can possess the disadvantages associated thereto. This feature finds non-limiting support in the disclosure as originally filed.⁷ Claims 18-25 depend directly or indirectly from Claim 17 but are otherwise similar to Claims 2, 4, and 7-12, respectively. Claims 26-30 find non-limiting support in the originally filed application, for example in Fig.

⁵ See the Pages patent at col. 5, lines 43-44.

⁶ See the Pages patent at col. 5, lines 47-51.

⁷ See page 3, lines 18-25, in Applicant’s specification.

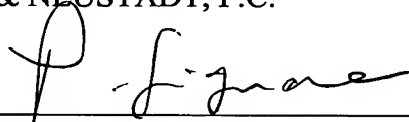
3 and at page 3, lines 20-23. Therefore, the new claims are not believed to raise a question of new matter.⁸

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-30 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

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⁸ See MPEP 2163.06 stating that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter."